

# Tempe Police and Fire Departments Community Assessment and Workload Analysis January 2014









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#### **Executive Summary**

The Tempe Police Department's 2013 strategic plan includes the completion of a comprehensive community assessment and staffing plan. As such, the purpose of this report is to proactively look at a wide range of factors that influence service delivery and then establish an appropriate response through a staffing plan. In collaboration with the Tempe Fire Department, a holistic approach was undertaken to ensure that this report is both comprehensive and responsible. As such, data was gathered from informal conversations, federal statistics repositories, and department records management systems. In brief, some areas researched support a greater need for staffing, others identify changing needs for service delivery, and others simply provide greater context.

This project began by gathering knowledge from Police Department personnel through informal conversations and a structured focus group. Throughout each conversation, three specific themes continued to be voiced. First, police personnel were concerned that the Department was not prepared to address the potential challenges with the number and magnitude (i.e., square footage and high rises) of recent/new development. Second, police personnel continued to express the negative impacts of increased workload due to the Department's recent budget reduction cuts and elimination of personnel. Third, Investigations is facing a growing complexity of cases and changing mandates, which require additional resources and time. To assess these concerns, it was apparent that additional data was necessary to understand the community we serve, forecast impacts of future development, and evaluate workload measures.

This report provides a comprehensive review of the city's demographics to identify significant trends in population characteristics and socioeconomic status. Changing demographics influence the amount and type of service required. Second, the City is recovering from the recent economic crisis. As a result, economic growth and development is on the rise. A thorough analysis of current and future development, inclusive of Arizona State University (where available), is provided. Third, a historical assessment of department workload measures gives insight on current and future service delivery levels. This report concludes with a detailed list of public safety staffing needs which are based on this assessment. Highlights of this report are provided below.

#### **Demographic Overview**

- Tempe's residential population growth is slower than the state and national rates over the past 10 years. However, its population increases by 46.1% each day due to commuting patterns (164,147 to 239,861 persons).
- Annually, the city attracts hundreds of thousands of attendees to special events, like the Buffalo Wings Bowl, Iron Man, New Year's Eve Block Party, the Rock & Roll Marathon, and ASU sporting events, which further impact Tempe's service population and traffic congestion.
- Tempe is a younger community (mean age 28.1 years) compared to the nation and state, and trending younger overall.
- Individuals living in Tempe are more likely to be a high school graduate or higher, and to have received a bachelor's degree or higher compared to national and state averages.
- Tempe's median household income is increasing at a significantly slower rate than the nation and state. Further, Tempe's median household income is lower than the nation and state medians.
- Twenty-one percent of Tempe residents are living below the poverty level. This is a 48% increase from 2000 to 2010.
- Tempe's housing unit growth of 10% from 2000 to 2010 lagged behind the nation and state.

• The percentage of owner-occupied housing units is decreasing over time. As of 2010, more housing units are renter occupied (55% renter occupied compared to 45% owner occupied).

#### **Economic Growth and Development**

- As of December 2013, the City of Tempe's Community Development Department lists 41 hotels, multi-family, mixed use, and select large-scale commercial projects in some form of development city-wide.
- In total, these projects will add over 7,266 new residential/hotel rooms.
- Eighty percent (33 out of 41) of these developments are planned for the northern portion of the city.
- Forty-four percent are listed as mixed use developments. In general, most are residential developments mixed with other forms of development (e.g., commercial, retail, restaurant, etc.).
- Large structures with multiple stories provide distinct challenges to first responders. Looking at these new developments, building square-footage ranges from 6,150 square feet to over 3 million square feet. The average building size is 447,607 square feet. Further, one in five of the proposed developments have a maximum height above 10 stories.
- Arizona State University's on-campus student population is expected to increase gradually while student makeup and housing arrangements are expected to change significantly.
- ASU is concentrating its efforts to recruit out of state and international students. This change increases the number of students living on, or near, campus; thus increasing the ASU student population served by the Tempe Police Department.
- ASU development is expected to increase in the near future. With a planned refurbishment of ASU's
  football stadium, ASU plans to create an associated stadium district. This district will blend
  academic research facilities, student classrooms, and commercial development.
- There is no clear understanding of who will have law enforcement jurisdiction, municipal or campus
  police, for ASU planned developments. As such, Tempe Police and Fire Departments are assuming
  that they will provide public safety services to these developments.
- Historical changes have already impacted public safety services. As an example, ASU's Fraternity
  Housing moved off campus as a result of construction plans on campus. As noted in the Loud Party
  Report, loud party and other nuisance calls for service increased in relationship to their locations
  within Tempe neighborhoods. See this report for further details.

#### **Police Workload Indicators**

- Since 2008, the Police Department has reduced its staffing level by 84 positions (20 sworn and 64 civilian).
- Calls for service for the Department have declined since 2004. However, they have remained relatively stable over the past three years. This trend is consistent with other valley agencies.
- While overall calls for service have declined, the amount of time required to complete a call for service has increased since 2010 (152 hours per day in 2010 to 176 hours per day in 2013).
- Response times for "top priority" calls for service have significantly increased from 5.6 minutes per call in 2010 to 6.8 minutes per call in 2013.
- Part I crime<sup>1</sup> has decreased citywide by 38% over the last decade. This is consistent with the nation and other valley agencies.
- Property crime has decreased 39% and violent crime has decreased 15% over the last decade.

<sup>&</sup>lt;sup>1</sup> Part I crime include homicide, rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson.

• Compared to other valley agencies in 2012, Tempe has the second highest rate of property crime and violent crime per 1,000 residents. It should be noted that this rate does not take into account Tempe's day time population increase.

#### **Fire Workload Indicators**

- Since 2009, the Tempe Fire Medical Rescue Department (TFMRD) has experienced a steady increase in calls for service within Tempe. Between 2009 and 2013, the number of emergency incidents to which the Department responded increased by 16.1%, while emergency medical incidents increased by 16.3%.
- While the number of medical assistance calls for service has increased, so have the changes in the
  nature of the medical calls within the community. There are specific increases in incidents requiring
  paramedic skills and life support.
- Between 2013 and 2018, TFMRD will experience known vacancies of 22 positions or 15.6% of front line staff due to retirements.
- The increase of calls for service between 2009 and 2013 and anticipated growth in density due to multi-story buildings demonstrates an anticipated increase in demands for service.

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#### Introduction

The following assessment was developed as a planning tool to identify future public safety resource needs for Tempe. This assessment furthers our understanding of the changing demands for public safety over the next three years. It provides a snapshot of resident demographics and how they have changed over the past 10-12 years. These indicators and the changing needs of the community influence workload demand. This assessment also reviews current and planned developments in the city and their impact on:

- Traffic patterns and congestion;
- Police calls for service and crime;
- Fire and crime prevention efforts; and
- Fire, Medical, and Rescue calls for service.

Further, Tempe is home to one of the largest universities in the nation. As such, this assessment includes a discussion on the impact to City public safety services as it relates to Arizona State University's Tempe Campus. Current and forecasted growth specific to on, and off, campus populations are reviewed as an indicator for future needs. Finally, an analysis of Department workload indicators is provided that includes trends in police, fire, medical, and rescue calls for service and crime. It analyzes the data by type of activity, as well as spatially across the city. The purpose of this document is to provide an accurate image of Tempe today while projecting into the future to effectively determine the public safety needs of our community, and strategically plan for resources and service delivery over the next three years.

#### **Background**

Tempe has grown from a small eclectic college town to a dynamic urban center. Tempe's General Plan 2040 provides a vision for its future:

"...elevating Tempe as the regional leader in urban living; expanding commercial and employment hubs; championing sustainable practices; enhancing quality of life and preservation of neighborhoods; and ensuring livability by keeping the community safe and secure."

(City of Tempe General Plan 2040, 11/21/2013)

Public safety executive staff is fully committed to sustainable practices that ensure the safety and security of our community. Tempe public safety departments have continued to maintain the high levels of service in spite of deep budget cuts over the past decade. Implementation of technology and changes in operational policy have improved efficiencies. The 2012 Tempe Community Survey demonstrated that over 82% of residents were "satisfied or very satisfied" with the quality of Police, Fire, Medical and Rescue Services. It also pointed out that their highest priorities were improving Police Services and Neighborhoods. However, with the existing and projected increase in population density and urban development, addressing staffing and resource deficits today will ensure that preventative and emergency service delivery continues to meet citizen expectations tomorrow.

## **Demographics**

The following demographic analysis provides an overview of the population served today compared to ten years ago to provide a greater context for understanding current and future service needs and associated methods of service delivery. For example, changes in the residential population at the city level and within smaller geographic regions provide distinct knowledge to forecast future workload demands. In addition to population counts, this section reviews community trends with age, sex, race/ethnicity, education, income, poverty, and housing preferences (i.e., own vs. rent). The following review compares each demographic indicator at the national, state, city, and Tempe zip code level between the years 2000 and 2010. As a reference, Figure 1 displays the geographic boundaries for the zip codes that comprise the city of Tempe.

#### **Population**

Comparing 2010 to 2000, the national population has grown by 10%. During this same time period, Arizona experienced a

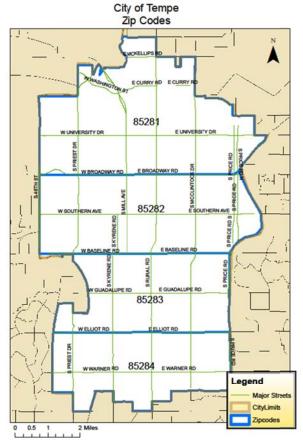


Figure 1: City of Tempe Zip Code Boundaries

greater growth rate of 25%. Even with Arizona's population boom, Tempe's growth rate was slower than both regions at just 2%. Fluctuations in population among zip codes are of particular interest. The northernmost zip code for the city had the greatest increase in population (12%) and the southernmost zip code had the greatest decrease in population (6%) between 2000 and 2010.

One of the unique qualities of Tempe is the changing nature of its population. Seasonal population as a result of Arizona State University (ASU) and student attendance, daytime population as a result of commuting to work, and event attendance all play a significant role in the city's changing dynamics over time. ASU's school attendance has made ASU the largest university in the country at 73,000 plus full time students<sup>2</sup>. While the

Population			
	2000	2010	%change
United States	281,421,906	308,745,538	10%
Arizona	5,130,632	6,392,017	25%
Тетре	158,625	161,719	2%
85281	51,051	57,348	12%
85282	51,244	48,671	-5%
85283	43,999	44,813	2%
85284	17,550	16,479	-6%

University brings many positive opportunities Table 1: Population Change

for its patrons, it also presents unique challenges for public safety. College sports are a big draw for current students and alumni. As a major employer, ASU plays a significant role in increasing the daytime

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<sup>&</sup>lt;sup>2</sup> This figure includes all ASU campuses US News and World Report

population<sup>3</sup> within the city, as well. Table 2 shows that Tempe experiences the largest daytime percent increase when compared to other Valley cities.

**Table 2: Daytime City Population** 

While Tempe grows 46.1% during the day as compared to Scottsdale's 26.2% and Phoenix's 9.1%, all other valley cities experience a reduction in population during the day. As a college destination, ASU attracts hundreds of thousands of attendees to ASU football, basketball, baseball, track and other sports throughout the school year. In addition, Tempe special events, like the Buffalo Wings Bowl, Iron Man, New Year's Eve Block Party, and the Rock & Roll Marathon impact the service population and traffic congestion. While these events bring revenue and tourism to

Daytime Population Change					
	Estimated Daytime				
	Resident	daytime	population		
City	population	population	change		
Apache Junction	33,956	29,565	-12.9%		
Avondale	70,274	51,959	-26.1%		
Chandler	229,531	210,423	-8.3%		
Gilbert town	195,046	151,563	-22.3%		
Glendale	229,687	207,663	-9.6%		
Mesa	439,639	408,028	-7.2%		
Peoria	148,702	117,228	-21.2%		
Phoenix	1,450,206	1,582,418	9.1%		

218,770

164,147

the city, they continue to require additional resources to plan for, organize and host these events. This influx in daytime populations and special event attendance significantly increase service delivery needs.

Scottsdale

Tempe

#### **Age and Sex**

From 2000 to 2010, the national and state median age has increased by 5% (see Table 3). In comparison, Tempe seems to be trending younger (2% decrease over the past ten years). Further, as of 2010 Tempe has a much younger median age (28.1 years) compared to the nation (37.2 years) and the state (35.9 years). This distinction in median age is primarily due to the low median age of residents in the northern part of the city (23.5 years), a 6% decrease compared to 2000. Conversely, the median age of residents in the most southern zip code increased. As this age gap has widened, the southernmost zip code's median age (45.1 years) is almost double that of the northernmost zip code.

2010 Male/Female Snapshot			
	Male	Female	%Female
United States	151,781,326	156,964,212	51%
Arizona	3,175,823	3,216,194	50%
Тетре	84,200	77,519	48%
85281	31,214	26,134	46%
85282	24,983	23,688	49%
85283	22,640	22,173	49%
85284	8,134	8,345	51%

Table 4: 2010 Male/Female Snapshot

Median Age (Years)			
	2000	2010	%change
United States	35.3	37.2	5%
Arizona	34.2	35.9	5%
Тетре	28.8	28.1	-2%
85281	24.9	23.5	-6%
85282	30.6	30.6	0%
85283	31.0	31.4	1%
85284	38.2	45.1	18%

278,218

239,861

27.2%

46.1%

Table 3: Median Age

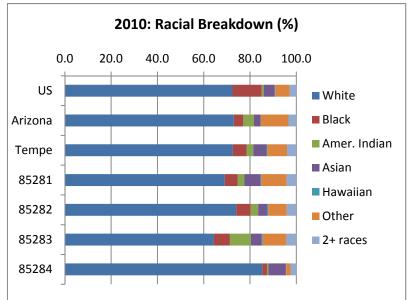
Nationally, 51% of the population is female (see Table 4). Both Arizona (50%) and Tempe (48%) have a lower percentage female population. In Tempe the proportion of female residents increases from north to south. This is interesting in that the zip code having the most significant growth over the past ten years (85281), and most populated, is only 46% female. The 2010 proportions for all geographic areas are consistent with those seen in 2000.

<sup>&</sup>lt;sup>3</sup> Daytime population is calculated by the US Census Bureau to be the number of commuters entering and exiting a given city per day.

#### **Race and Ethnicity**

Consistent with the U.S. trend, Tempe's population is becoming more racially diverse. In other words, all four geographic regions (i.e., the U.S., Arizona, Tempe, and Tempe zip codes) reflect a decrease in the proportion of the population that is white (see Appendix A for 2000 racial breakdown). Further, 2010 figures show Tempe mirroring the state and national proportions (see Figure 2). Focusing specifically on Tempe, the central zip codes have seen the largest change over the past 10 years in the proportion of residents who are white (85282, -6%; 85283, -10%). The most southern zip code of the city reflects the smallest proportion

Figure 2: 2010 Racial Breakdown



of racial diversity (85.4% white) in Tempe.

Ethnicity: % Hispanic or Latino			
	2000	2010	%change
United States	12.5	16.3	30%
Arizona	25.3	29.6	17%
Тетре	17.9	21.1	18%
85281	25.2	24.6	-2%
85282	16.5	20.6	25%
85283	22.1	26.7	21%
85284	6.9	8.9	29%

**Table 5: Ethnicity** 

A review of ethnic trends shows the percentage of Hispanic or Latinos increasing nationally, at the state level, and in Tempe (see Table 5). Arizona has a much higher proportion of its community describing themselves as Hispanic or Latino than the U.S. (29.6% compared to 16.3%). Tempe's proportion is lower than Arizona, but still higher than the U.S. Similar to the above review of race, Tempe's southernmost zip code has the lowest proportion of Hispanic or Latino community members compared to the other zip codes, the city, and the nation. Overall, the data shows the

proportion of Hispanic or Latino community in Tempe growing. Small change is seen in the northernmost zip code of the city where the proportion of Hispanic or Latino community members has declined by 2% between 2000 and 2010. However, this area has had, and still has, one of the highest proportions of Hispanic or Latino residents.

#### **Education**

While Arizona is pacing with the nation in the percentage of residents that are high school graduates or higher (see Appendix B), it lags slightly behind in Bachelor's degree or higher graduates (see Figure 3). Tempe, on the other hand, is well above the nation and state for both. Over 90% of Tempe residents are a high school graduate or higher, with Arizona and the U.S. at 85.2% and 85.4%, respectively. Further, in Tempe, 41.3% of those 25 and older hold a Bachelor's degree or higher, with Arizona and the U.S. at 26.4% and 28.2%, respectively.

The highest percentage of respondents with a Bachelor's degree or higher are located in the southernmost area of the city (65.3%).

# Income, Poverty and Unemployment

While Tempe's median household income increased by 15% from 2000 to 2010 (see Table 6), the nation and state's median household income had a far greater increase (26% and 25%, respectively). Further, Tempe's median household income (\$48,618) is over \$2,000 less than the state's median (\$50,752). Within Tempe there is great disparity of median household income from north to south. Similar to median age, median household income increases incrementally from north to south. The southernmost area of the city showed the greatest increase (35%) from 2000 to 2010, and has a median household income over 3.5 times greater than the northernmost area of the city.

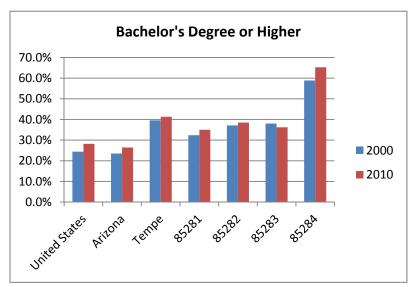
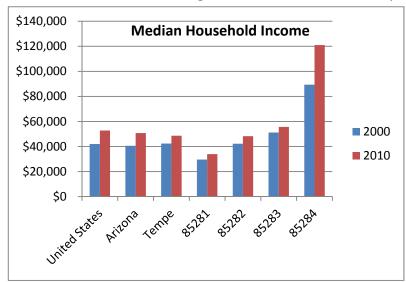


Figure 3: Bachelor's Degree Attainment

Figure 4: Median Household Income Graph



**Table 6: Median Household Income Change** 

Median Household Income			
	2000	2010	%change
United States	\$41,994	\$52,762	26%
Arizona	\$40,558	\$50,752	25%
Tempe	\$42,361	\$48,618	15%
85281	\$29,605	\$33,937	15%
85282	\$42,258	\$48,263	14%
85283	\$51,208	\$55,633	9%
85284	\$89,396	\$120,949	35%

Amidst the recession, unemployment<sup>4</sup> has increased across the country in the last decade (see Table 7). In 2000, unemployment in Arizona (5.6%) and Tempe (4.3%) were below the national rate (5.7%). In 2010, both city and state rates were at 9.7% unemployment, above the nation's at 9.2%. The northernmost zip code had the highest unemployment rate in both years (6% in 2000 and 12% in 2010), while the southernmost zip code had the lowest (2.2% in 2000 and 5.1% in 2010.

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<sup>&</sup>lt;sup>4</sup> Unemployment calculated by number of persons 16 years of age and older in the labor force who are unemployed.

**Table 7: Unemployment** 

Unemployment			
	2000	2010	%change
<b>United States</b>	5.7%	9.2%	61%
Arizona	5.6%	9.7%	74%
Tempe	4.3%	9.7%	127%
85281	6.0%	12.0%	101%
85282	4.1%	9.2%	125%
85283	3.6%	9.7%	169%
85284	2.2%	5.1%	133%

**Table 8: Individuals in Poverty** 

% of Individuals below the Poverty Level			
	2000	2010	%change
United States	12.4	14.3	15%
Arizona	13.9	16.2	17%
Тетре	14.3	21.1	48%
85281	26.5	33.4	26%
85282	12.1	21.3	76%
85283	10.1	16.3	61%
85284	2.9	4.2	45%

Between 2000 and 2010, there was a 15% increase in the proportion of individuals living below the poverty level<sup>5</sup> in the U.S. (2000, 12.4%; 2010, 14.3%) (see Table 8). Arizona's proportion of individuals living below the poverty level and the change from 2000 to 2010 closely resembled the national trend. Conversely, Tempe showed a drastic difference from both the nation and state, with over 21% of Tempe residents living below the national poverty level in 2010, a 48% increase from 2000. Similar to income levels, the percentage of residents living below the national poverty level increase from the southernmost zip code to the northernmost zip code. Values range from 4.2% in the southernmost zip code to 33.4% in the northernmost zip code. The smallest change (26% increase) in residents living below the national poverty level occurred in the northernmost zip code, which is not surprising since that zip code contained the highest proportion in 2000.

#### Housing

The number of housing units in Arizona has grown by 30% from 2000 to 2010, compared to a 14% increase nationally (see Table 9). However, Tempe's housing unit growth has only seen a 10% increase over the same time period. Significant differences in housing unit growth are seen amongst Tempe's zip code boundaries. While most of the city has only seen single digit percentage increases, the northernmost part of the city has seen a 21% increase in housing units from 2000 to 2010.

**Table 9: Housing Units** 

Housing Units			
	2000	2010	%change
United States	115,904,641	131,704,730	14%
Arizona	2,189,189	2,844,526	30%
Тетре	67,068	73,462	10%
85281	21,511	26,011	21%
85282	22,816	23,136	1%
85283	17,807	19,320	8%
85284	6,122	6,407	5%

Tempe's percentage of vacant housing units (10.2 %) has remained lower than the national (11.4%) and state (16.3%) levels in 2010 (see Table 10). However, the percentage change from 2000 to 2010 shows a significant trend. Specifically, the proportion of vacant housing units from 2000 to 2010 has seen a 27% increase nationally and 24% at the state level. In stark contrast, Tempe's proportion of vacant housing

<sup>&</sup>lt;sup>5</sup> The national poverty level threshold is established on an annual basis. In 2000, the poverty level threshold was set at \$8,794 per year. In 2010, the threshold was \$11,139. http://www.census.gov/hhes/www/poverty/data/threshld/index.html

units has almost doubled. The largest increase in the percentage of vacant housing units is found in the northernmost part of the city (from 6.2% to 15.1%), while each of the remaining three zip code areas also reflects increases higher than the national and state level. However, the proportion of vacant housing units is still much lower in the three southern zip codes than at the state and national levels.

Tempe's proportion of owner-occupied housing units (44.5%) is much lower than the national (65.1%) and state (66.0%) proportions (see Figure 5). A review of the trend data shows Tempe's 13% decrease in owner-occupied housing from 2000 to 2010 shows Tempe moving to a more renter-occupied community at a faster pace than the nation (2% decrease) and state (3% decrease).

% V	% Vacant Housing Units									
	2000	2010	%change							
United States	9.0	11.4	27%							
Arizona	13.1	16.3	24%							
Тетре	5.2	10.2	96%							
85281	6.2	15.1	144%							
85282	4.7	8.7	85%							
85283	5.4	7.0	30%							
85284	2.7	3.8	41%							

**Table 10: Vacant Housing** 

Figure 5: Owner-Occupied Housing
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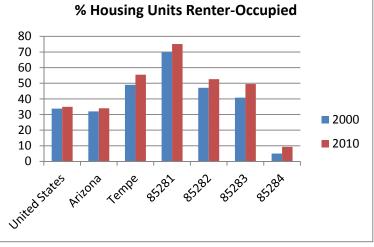
While owner-occupied housing unit proportions have decreased in all areas examined (and conversely, renter-occupation has increased across the board), the percentage of owner-occupation increases from north to south Tempe. For example, the northernmost zip code has an owner-occupied rate of only 24.9 percent, while the southernmost zip code has an owner-occupied rate of 90.7 percent.

Figure 6: Renter-Occupied Housing

The proportion of renter-occupied housing units in the northernmost zip code is over three times the proportion of the southernmost zip code (see Figure 6). Finally, the trend data suggests renter-occupation is growing slowest in the southernmost zip code of the city.

### **Demographic Summary** Tempe

Tempe's population growth is slower than the state and national rates over the past 10



years. However, this demographic indicator may not take into account changes in Arizona State University's student population, and does not take into account the significant day time population change based on commuting workers. Further, Tempe is the host of a multitude of special events throughout the year with attendee numbers surpassing 100,000 people for any given event. Tempe is a

younger community (mean age 28.1 years) compared to the nation and state, and trending younger overall. It is incrementally becoming a more diverse community specific to race and ethnicity. Unlike the nation and state, in which slightly over 50% of the population is female, females account for 48% of Tempe's population. Individuals living in Tempe are more likely to be a high school graduate or higher, and to have received a bachelor's degree or higher compared to national and state averages.

A review of economic indicators shows Tempe's median household income increasing at a significantly slower rate than the nation and state. Further, Tempe's median household income is lower than the nation and state medians. The percentage of individuals living below the poverty level in Tempe (21%) is over 48% and 30% greater than the nation and state ratios. This is a 48% increase compared to 2000 in the proportion of Tempe residents living below the poverty level. Tempe's housing unit growth of 10% from 2000 to 2010 lagged behind the nation and state. As housing unit growth remained low, the percentage of vacant houses in Tempe also doubled from 2000 (5.2%) to 2010 (10.2%). It should be noted that Tempe's vacant housing ratio remains lower than the nation and the state. Finally, the percentage of owner-occupied housing units is decreasing over time. As of 2010, more housing units are renter occupied (55% to 45% owner-occupied).

#### **Zip Code Highlights**

The northernmost zip code (85281) is growing the fastest, has the youngest residential population, is one of the more diverse areas of the city (specific to race and ethnicity), has the highest percentage of male residents (54%), has the lowest population achieving a high school diploma and/or bachelor's degree or higher, has the lowest median income, has the highest percentage of individuals living below the poverty line, has the highest number of housing units, has the highest percentage of vacant housing units, and has the highest percentage of housing units renter-occupied (75.1%).

The north central zip code (85282) is decreasing in population, is retaining its median age, has the most significant increase in the percentage of individuals living below the poverty line (76% increase), and has the smallest increase in housing units between 2000 and 2010.

The south central zip code (85283) is increasing in population, is retaining its median age, and is showing the greatest demographic change (specific to race and ethnicity).

The southernmost zip code (85284) has the largest percent reduction in population, has the oldest median residential population, is the least diverse (specific to race and ethnicity), has the highest percentage of female residents (51%), has the highest percentage of residents achieving a high school diploma and/or bachelor's degree or higher, has the highest median household income, has the lowest percentage of individuals living below the poverty line, has the lowest number of housing units, has the lowest percentage of vacant housing units, and has the highest percentage of owner-occupied housing units.

#### **Public Safety Implications**

The implications of these demographic changes suggest that Tempe will have a higher proportion of residents who are in their crime prone years, particularly in the north. The northern portion of the city is growing younger, more male and, as a result of being land-locked, is becoming more densely populated (e.g., high rises). Conversely, as the residents in southern Tempe grow older, more medical and paramedic services may be required. Increases in poverty and rental occupancy in the north require a different approach to service delivery. Research suggests that levels of crime and victimization

occur at higher rates in lower income areas. Further, the transient nature of individuals living in rental communities creates unique challenges for ongoing crime prevention efforts.

# **Economic Growth & Development Tempe**

Economic growth significantly influences public safety resource needs through increased population, traffic congestion, and response complexity (e.g., high rise development, hazardous materials, special needs residents, etc.). Major changes over the past 10-15 years have already impacted the scope and nature of service delivery. Tempe has experienced the development of Arizona Mills Mall, Tempe Market Place, other major retail businesses (e.g., Tempe Autoplex, IKEA, and the Walmart Superstore), an expanded transportation system (e.g., freeway, light rail and other mass transit), Tempe Beach Park and Tempe Town Lake, and has experienced the opening of recent high rise student housing developments (e.g., West 6<sup>th</sup>, University House, 922 Place, the District, and Grigio).

Further, Downtown Tempe<sup>6</sup>, inclusive of Mill Avenue, is the destination for residents and visitors looking for a great place to live, work, and play. The downtown continues to be a priority for public safety. The Tempe Police Department prides itself on making downtown a safe destination through assigned bike patrols, proactive enforcement details, and quality partnerships. Significant effort has been placed to promote a safe environment; however, the downtown is still facing issues. A recent analysis shows Part I crime increasing in this area (21.5% from 2010 to 2012), while decreasing city-wide. Disorderly conduct associated with the homeless is also a growing concern. In addition, the development of light rail has added complexity to the downtown due to issues associated with mass transit. These challenges require a more sustainable response than current practices.

With the recovery of the economy and solid construction plans in place, Tempe anticipates further growth and development. A current example is the new State Farm development located at 300 E Rio Salado Parkway. This development covers a footprint over 20 acres and includes a building structure over 2 million square feet. Its height will reach 253 feet, or approximately 25 stories. It is estimated that this development will bring over 8,000 new jobs to Tempe. As this project is developed, traffic congestion will increase due to road closures and restrictions for construction. Once developed, there will be a significant impact on the daily population density in the downtown area. As density increases so will public safety needs. Also of importance is the specific challenge this type of development provides to first responders as a high rise building. Responding to a multi-story structure requires a different/more complex form of response compared to a single story residential or commercial dwelling.

As of December 2013, the City of Tempe's Community Development Department lists 41 hotels, multifamily, mixed use, and select large-scale commercial projects in some form of development city-wide. Table 11 lists these projects by stage of development, estimated units/rooms, and maximum height. In total, these projects will add over 7,266 new residential/hotel rooms.

<sup>&</sup>lt;sup>6</sup> Downtown Tempe is roughly defined by University Drive to the North bank of Tempe Town Lake, and Ash to College.

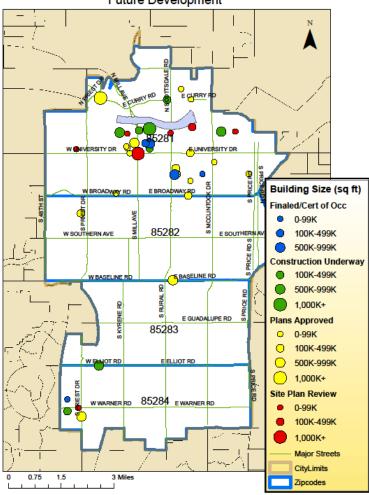
Table 11: City of Tempe Development Projects (as of Dec. 2013)

/IS	ED: DECEMBER 2013						
		FINALED / C	CERTIFICATE OF OCCUPANCY				
	PROJECT	SITE ADDRESS	PROPOSED USE / DESCRIPTION	ACRES	BLDG SF <sup>2</sup>	# OF UNITS RES OF HOTEL ROOM	MAX. HEIGH
ľ	RESIDENCE INN TEMPE - MARRIOTT	510 S. Forest Ave	HOTEL	0.35	143,263	173	146'
	UNIVERSITY HOUSE [THE HUB] - PHASE I	323 E. Veterans Way	MIXED-USE; RES / COM	1.67	500,000	269 DU; 828 BEDS	195'
	THE DISTRICT ON APACHE	977 E. Apache Blvd	MIXED-USE; RES / COM	5.51	695,782	279 DU; 900 BEDS	86'
	GRACIES VILLAGE	1520 E. Apache Blvd	MIXED-USE; RES / RETAIL	1.98	92,000	50	54'
	MAIN EVENT	8545 S. Emerald Dr	COMMERICAL / ENTERTAINMENT	6.4	59,027	n/a	55'
		CONS	TRUCTION UNDERWAY				
V	PROJECT	SITE ADDRESS	PROPOSED USE / DESCRIPTION	ACRES	BLDG SF <sup>2</sup>	# OF UNITS RES or	MAX. HEIGH
d)	PROJECT	SITE ADDRESS	PROPOSED USE / DESCRIPTION	ACRES	BLDG SF	HOTEL ROOM	WAX. HEIGH
	STATE FARM AT MARINA HEIGHTS	300 E. Rio Salado Pkwy	MIXED-USE; OFFICE / RES	20.118	2,150,000	n/a	253'
	ARGO AT TOWN LAKE	601 W. 1st St	MIXED-USE; RES / LIVE-WORK / STUDIO SPACE	5.72	604,105	328 DU; 496 BEDS	90'
	HAYDEN FERRY LAKESIDE - PHASE III	40 E. Rio Salado Pkwy	MIXED-USE; RES / LIVE-WORK / STUDIO SPACE	1.8	281,720	n/a	171'8"
	SUNDEVIL MARKETPLACE [BLOCK 12]	660 S. College Ave	COMMERICAL / RETAIL	1.8	114,415	n/a	88'8"
	CAMDEN TEMPE [ARCHSTONE]	800 E. Curry Rd	MULTI-FAMILY RES	7.8	122,188	234; 392	61'
5	SAN CAPELLA - MARK TAYLOR RESIDENTIAL	1155 W. Elliot Rd	MULTI-FAMILY RES	19.5	506,743	384	38'
7			HOTEL				85'
8	DRURY INN SUITES LIBERTY CENTER AT RIO SALADO	1780 W. Ranch Rd 1850 E. Rio Salado Pkwy	OFFICE [6 NEW BLDGS]	2.96 76.3	104,524 810,000	180 n/a	45'-80'
120	The state of the s		•			(Internal	
		PLANS	S APPROVED / ENTITLED				
#	PROJECT	SITE ADDRESS	PROPOSED USE / DESCRIPTION	ACRES	BLDG SF <sup>2</sup>	# OF UNITS RES OF HOTEL ROOM	MAX. HEIGH
				a strong		-	
L	THE LOFTS AT HAYDEN FERRY LAKESIDE	260 E. Rio Salado Pkwy	MULTI-FAMILY RES	3.42	524,815	264	60'
2	HANOVER MILL AVENUE	101 W. 5th Street	MIXED-USE; RES / RETAIL	2.79	574,670	341	85'
3	FARMER ARTS DISTRICT	280 W. University Dr	MIXED-USE; RES / OFFICE / LIBRARY / LIVE-WORK	8.81	n/a	n/a	80'
1	RESIDENCES ON FARMER AVE.	615 S. Farmer Ave	MIXED-USE; RES	0.59	32,834	30	50'
5	THE GRAND AT PAPAGO PARK CENTER	1151 W. Washington St	MIXED-USE; OFFICE / HOTEL / RES / RESTAURANT	64.7	3,187,000		156'
6	"LEMON + TERRACE"	1010 E. Lemon St	MIXED-USE; RES	3.56	496,597	220 DU; 600 BEDS	76'
7	THE NEWPORT	1102 E. Weber Dr	SINGLE-FAMILY RES	2.29	29,695	40	35'
В	BELLA VITA TOWNHOMES	1004 N. Miller Rd	SINGLE-FAMILY RES	1.14	13,898	18	35'
9	THE RESIDENCES AT UNIVERSITY CENTER	1260 E. University Dr	MULTI-FAMILY RES	7.1	353,394	296	58'
0	CLARENDON TOWNHOMES	425 W. 6th St	SINGLE-FAMILY RES	0.77	56,803	24	48'
1	THE GROVE	1000 E. Apache Blvd	MULTI-FAMILY RES	1.8	726,348	326 DU; 833 BEDS	160'
2	THE STANDARD ON BROADWAY	1245 E. Broadway Rd	MIXED-USE; RES	7.8	227,619	194	38'
3	RESIDENCES AT FOUNTAINHEAD CORP PARK	2520 S. Plaza Dr	MIXED-USE; RES	10.01	387,578	322	64'
4	APACHE VILLAS	2148 E. Apache Blvd	MIXED-USE; RES	2.14	19,818	76	60'
5	HAYDEN LANE TOWNHOMES	1825 E. Hayden Lane	SINGLE-FAMILY RES	0.19	6,150	3	30'
6	KENNETH PLACE TOWNHOMES	1414 + 1425 S. Kenneth Pl	SINGLE-FAMILY RES	0.376	16,404	8	30'
17	McKEMY TOWNHOMES	647 W. 19th St	SINGLE-FAMILY RES	0.56	11,800	22	29' 6"
18	SAN SONOMA - MARK TAYLOR RESIDENTIAL	9010 S. Priest Dr	MIXED-USE; RES / COM	29		590	44'
19	UNIVERSITY HOUSE [THE HUB] - PHASE II	323 E. Veterans Way	MIXED-USE; RES / COM	1.67	127,930	72	195'
20	LAKES COUNTRY VILLAGE	1030 E. Baseline Rd	MULTI-FAMILY RES	14.71	511,074	367	42'
			SITE PLAN REVIEW				
	PROJECT	SITE ADDRESS	PROPOSED USE / DESCRIPTION	ACRES	BLDG SF <sup>2</sup>	# OF UNITS RES or	MAX. HEIGH
	10000000	e conferment				HOTEL ROOM	
1	LPC AT SOUTHBANK	1450 E. Vista del Lago	RES SENIOR HOUSING; PART OF MIXED-USE PAD	3.58	370,000	358	58'
2	USA PLACE	9 E. University Dr	MIXED-USE; HOTEL; EDUCATIONAL	11	1,319,850	508 DU; 350 HOTEL	200'
3	CULINARY DROPOUT [FARMER ARTS DISTRICT]	149 S. Farmer Ave	MIXED-USE; RESTAURANT	1.43	20,766	n/a	35'
4	TEMPE MARKETPLACE EAST	2040 E. Rio Salado Pkwy	HOTEL [QTY 2; 4-STORY]	14.9	t.b.d.	126 + 128 = 254	t.b.d.
6	CAPSTONE COTTAGE OF TEMPE	708 S. Lindon Ln	MULTI-FAMILY RES	15.1	t.b.d.	132	t.b.d.
7	"TEMPE TOWN LAKE RESIDENTIAL"	400 N. Scottsdale Rd	MULTI-FAMILY RES	t.b.d.	t.b.d.	t.b.d.	t.b.d.
8	DORSEY CROSSING	1233 E. Broadway Rd	MULTI-FAMILY RES	t.b.d.	t.b.d.	54	t.b.d.
9	TILTED KILT [CORPORATE OFFICE]	1617 W. Warner Rd	OFFICE	3.02	21,000	n/a	t.b.d.

Spatially, as can be seen in Figure 7, over 80% (33 out of 41) of these developments are planned for the northernmost zip code of the city. Forty-four percent are listed as mixed use developments. In general, most are residential developments mixed with other forms of development (e.g., commercial, retail, restaurant, etc.).

Looking at these new developments, building square footage ranges from 6,150 square feet to over 3 million square feet. The average building size is 447,607 square feet. Further, one in five of the proposed developments have a maximum height above 10 stories. In short, the projected square footage of these developments, in addition to the number of multi-story structures, poses significant challenges to first responders in the future.

Figure 7: Future Economic Development Locations
City of Tempe
Future Development



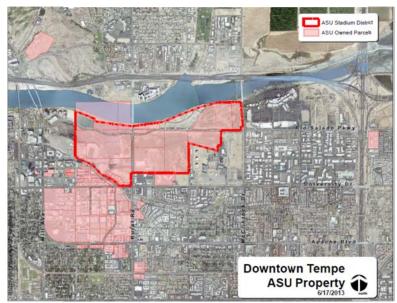
#### **Arizona State University**

During a conversation with Arizona State University's Planner, a vision of Arizona State University's future was provided with regard to student population/demographics and economic development<sup>7</sup>. Arizona State University's on-campus student population is expected to increase gradually while student makeup and housing arrangements are expected to change significantly. Specifically, ASU planners expect a 1% increase in the on-campus student population per year for the next several years. While campus foot traffic is expected to grow slowly overtime, changes in recruitment practices and policy changes with student housing expectations are more substantial. First, ASU is concentrating its efforts to recruit out of state and international students. As a result of these efforts, ASU is realizing a greater proportion of out of state students than in the past. This change increases the number of students living on, or near, campus; thus increasing the ASU student population served by the Tempe Police Department. Second, ASU requires all freshman students to live in University housing. This emphasis in recruitment and policy expectation for freshman students means more students living in and engaging our community without consistent parental involvement. These changes create challenges for the

<sup>&</sup>lt;sup>7</sup> ASU's development information is based on informal meetings with ASU staff. The Department was unsuccessful in collecting official planning data from ASU.

Department responding to inappropriate behavior (e.g. loud parties, nuisance activity, victimization, crime, etc.) associated with this demographic.

ASU development is expected to increase in the near future. With a planned refurbishment of ASU's football stadium, ASU plans to create an associated stadium district. This district will blend academic research facilities, student classrooms, and commercial development. This development will replace what is currently vacant property, parking lots, and a golf course (see Figure 8). As such, pedestrian and bike travel will increase significantly in this area, as well as increased traffic congestion. While these issues must be addressed through proactive planning with engineers, of greater



**Figure 8: ASU Future Development** 

concern is jurisdictional authority. To date, there is no clear understanding of who will have law enforcement jurisdiction, municipal or campus police, for these and other ASU planned developments. This decision will greatly impact the number and type of resources needed to respond to activity in this area. As such, Tempe Police and Fire Departments are assuming that they will provide services to these developments for public safety needs.

In addition to the stadium district, ASU will continue to develop throughout the city as needs arise. The planned USA Basketball complex is one example. At the southeast corner of Mill and University, this complex includes an Olympic basketball venue that includes six courts and 4,500 seats, a conference center, office and retail space, luxury residential units, and a hotel. Centerpoint will continue to be an asset for ASU, as well as the ASU Research Park. Currently, GoDaddy is building a two-story, 150,000 sq. ft. Global Technology Center at the research park inclusive of 1,300 employees<sup>8</sup>. Along with the new State Farm Insurance Company development on Rio Salado Parkway, ASU's development greatly impacts service needs.

Historical changes have already impacted public safety services. As an example, ASU's Fraternity Housing moved off campus as a result of construction plans on campus. As noted in the *Loud Party Report*, loud party and other nuisance calls for service increased in relationship to their locations within Tempe neighborhoods. See this report for further details.

<sup>&</sup>lt;sup>8</sup> Source: http://www.godaddy.com/news/article/godaddy-global-technology-center-breaks-ground-in-tempe.aspx

#### **Police Workload Indicators**

Core components of police work include responding to calls for police service, documenting and investigating criminal activity, apprehending offenders responsible for these crimes and assisting in their prosecution. The demand for police services include responding to 911 emergency calls and non-emergency calls for help from citizens. A small proportion of calls for service are crime-related where a police report is taken, typically 15-20%. Historical trends in sworn and civilian staffing, calls for service, response times, and crime are included in this section to help predict their future impact on police work. In an attempt to put this data into a comparative perspective, data—where available—was used to contrast crime and arrest information across cities within the Phoenix metropolitan area, as well as across the state and nation.

#### **Staffing Levels**

Since a major factor that contributes to Police workload is staffing levels, this section begins with an overview of police personnel since 2004. Figure 9 illustrates that both sworn and civilian ranks began to grow gradually between 2004 and 2008 to support mission critical functions. Between 2004 and 2008, the Department added 29 sworn positions and 30 civilian positions. In 2009 the U.S. economy faced its worst recession since the Great Depression. As a result, the Department was directed to cut \$7.25 million in their operating budget as part of the City's budget reduction process. At that time, the Tempe Police Department

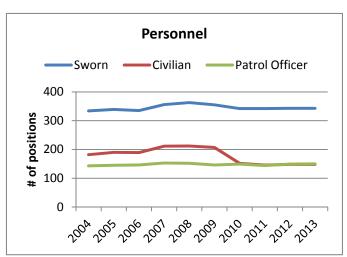


Figure 9: Sworn/Civilian Personnel

was comprised of 575 employees (363 sworn and 212 civilian). Since 2008, the Police Department reduced its staffing level by a total of 84 positions (20 sworn and 64 civilian), and experienced significant decreases in its operating base budget (see Table 12).

Police Department Staffing											%change
Authorized	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	'04-'13
Patrol Officer	143	145	146	153	152	146	149	144	149	150	5%
Sworn	334	339	335	356	363	355	342	342	343	343	3%
Civilian	182	190	189	211.5	212	207	152	146	148	148	-19%
Sworn:Civilian Ratio	1.84	1.78	1.77	1.68	1.71	1.71	2.25	2.34	2.32	2.32	26%

Source: Tempe Annual Budget - Personnel Schedule / Sworn Includes patrol officers

**Table 12: Sworn/Civilian Ratios** 

Through these reductions, the Department attempted to minimize the impact of direct police services to the community by maintaining sworn officer staffing levels in patrol (i.e., emergency responders). Table 12 shows patrol officers have remained relatively constant (152 to 150 between 2008 and 2013). However, The Department made significant cuts in investigations, support services, and civilian patrol staff (e.g., Community Service Officers (CSO), park rangers, records clerks, and first line supervision).

The ten CSO positions eliminated from Patrol provided support to the community through response to non-emergency calls for service and by writing an estimated 30% of the reports taken in Patrol

operations. Today, patrol officers answer these non-emergency calls and write associated reports. Further, when the city's park ranger program was eliminated, 17 full-time patrol support employees were lost. Elimination of this program has required patrol officers to respond to calls for service within city parks and to provide proactive patrols when available. As such, the Department is no longer able to proactively patrol city parks and address concerns before becoming significant issues.

Another area impacted by the budget cuts was the Records Bureau. Records personnel were cut by five positions between 2008 and 2010, and as a result public access hours to Records were reduced. These after hour duties were shifted to Communications personnel already tasked with managing calls for service. With this reduction of civilian support staff (i.e., CSOs, park rangers, records), the Department's ability to provide field support was eliminated or significantly reduced.

Finally, the Department's ability to advance its technology infrastructure rests on adequate staffing and training of professional staff. Due to significant cuts in the City's Information Technology Department, the Police Department is lagging behind industry standards toward maintaining and enhancing police technology. In an attempt to address this gap, the Department reassigned one sergeant, two officers and one records clerk to support this function. Further, a Bureau Manager's scope of responsibility was shifted to manage technology on a full time basis. While the Department has turned to technology solutions to improve efficiencies, additional support staff is required to adequately leverage and sustain this technology. For more information on Department's technology infrastructure, see 2014 Technical Services Unit Proposal.

#### **Calls for Service**

As seen in Figure 10, total calls for service (CFS)<sup>9</sup> have been on a steady decline over the last decade, with an overall 23% decrease (192,141 in 2004 to 147,928 in 2013).

Figure 11: Calls for Service by Source

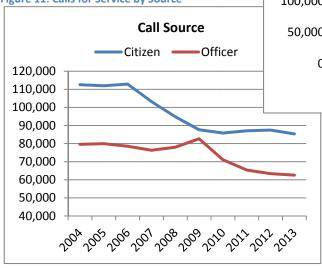
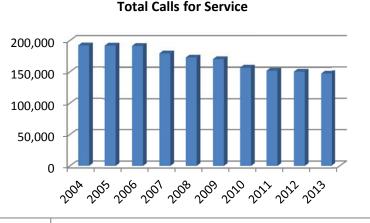


Figure 10: Calls for Service, 2004-2013



Citizen-generated calls have generally been on the decline until 2011, when they increased for two years, then decreased in 2013 (see Figure 11). From 2004 to 2013, there has been an overall 24% decrease in citizen CFS. Officer generated CFS were steady, peaked in 2009, then declined. From 2004 to 2013, there has been an overall 21% decrease in officer generated CFS.

<sup>&</sup>lt;sup>9</sup> Total calls for service encompass both citizen generated (i.e., calls where citizens contact the police for assistance) and officer generated (i.e., calls where officers proactively view and respond to an activity that requires a police response).

Table 13 shows the current geographic distribution of calls for service by zip code. As shown, a greater proportion of calls for service is found in the northern most zip code and decreases moving south. When accounting for population, Tempe received 497 citizen calls per 1,000 people in 2013 (Table 13). Zip code 85281 had a much higher rate at 717 calls per 1,000. The proportion decreases moving south, with 85283 and 85284 well under the city rate (280 and 289 per 1,000).

Table 13: CFS by Zip Code

2013 Citizen CFS by Zip Code									
Zipcode	Count	% of City CFS	Rate (per 1,000 pop)*						
85281	41,140	51%	717						
85282	21,948	27%	451						
85283	12,539	16%	280						
85284	4,755	6%	289						
Tempe	80,382	100%	497						

<sup>\*</sup>based on 2010 census population

#### **CFS Comparison: Other Valley Cities**

It is important to examine call for service trends around the Valley to gauge how activity in surrounding areas<sup>10</sup> may impact Tempe's activity (see Appendix C for detailed table). As shown in Table 14, changes vary greatly among different cities' CFS rates (per 1,000 residents). Tempe has experienced a 26% decrease on a per resident basis since 2004, similar to those of Glendale (-21%) and Mesa (-24%).

	All Calls for Service per 1,000 Residents- Select Cities										
City/Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2013
Chandler	611	642	681	690	672	635	608	589	556	589	-4%
Gilbert	590	621	813	803	859	891	908	828	819	832	41%
Glendale	712	662	652	659	612	581	567	564	562	563	-21%
Mesa			847	839	757	724	712	724	704	646	-24%
Scottsdale				1,058	1,049	1,061	1,029	1,067	1,032	1,051	-1%
Surprise	780	744	745	734	801	861	787	804	988	818	5%
Tempe	1,213	1,217	1,225	1,147	1,085	1,066	970	938	916	896	-26%

Table 14: CFS per 1,000 Residents

The average CFS per 1,000 residents for select cities over the decade decreased by 1.3%, from 781 calls per 1,000 residents in 2004 to 771 in 2013 (see Figure 12). Tempe's CFS per 1,000 residents decreased by 26% over the same period, from 1,213 to 896 calls per thousand. While Tempe had the highest CFS volume per 1,000 residents in 2004, they had the second highest CFS per 1,000 in 2013, behind Scottsdale at 1,051 calls per 1,000. It must be stressed that the rate takes into consideration CFS per resident population, and does not reflect the large population surge of visitors and workers experienced in the daytime.

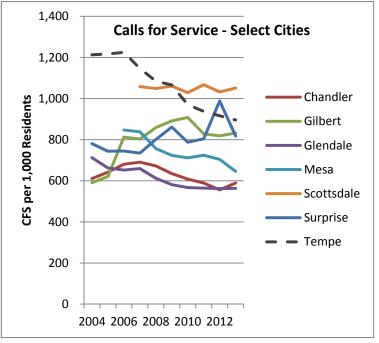
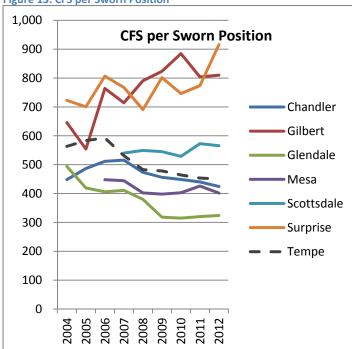


Figure 12: CFS per 1,000 Residents

 $<sup>^{</sup>m 10}$  Select cities are based on cities that provided Tempe PD with CFS, crime, and staffing data.





When considering workload per sworn personnel<sup>11</sup>, the average CFS for the select cities decreased by 3.3% over the decade, from 475 in 2004 to 556 in 2012 (see Figure 13). Tempe's calls per sworn decreased by 20% over the same time period. In 2012, Tempe ranked directly in the middle of the select cities at 450 calls per sworn. Surprise had the most at 916 calls, and Glendale had the least at 324 calls per sworn.

#### **Time Spent On Calls**

Another important indicator of officer workload is the amount of time spent on calls<sup>12</sup> on a typical day. Data<sup>13</sup> indicates that the hours per day spent on calls went down for six years in a row and have gradually begun to rise over the past three (3) years (see Figure 14). In 2004, patrol spent 189 hour per day on citizen

generated calls for service, dipped to 152 hours per day in 2010, and have since rebounded to 176 hours per day in 2013. From 2004 to 2013, the number of hours spent on calls has decreased by 7%, but has increased by 16% since 2010.

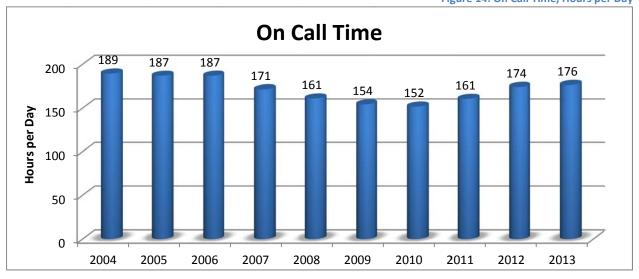


Figure 14: On Call Time, Hours per Day

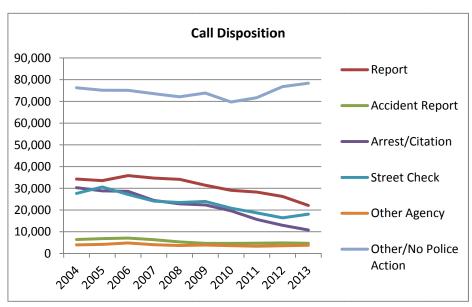
<sup>&</sup>lt;sup>11</sup> Data come from the Federal Bureau of Investigations, Table 71. 2013 data is not yet available.

<sup>&</sup>lt;sup>12</sup> Calculated based on dispatch to clear, using both citizen and officer generated calls for service. This only reflects the time from the call was dispatched to the time the last officer left the call (closed the call). It does not reflect the full amount of time officers spent on the call – when multiple officers responded.

<sup>&</sup>lt;sup>13</sup> 2011 data may be inaccurate. The Police Department transitioned to a new Computer Aided Dispatch (CAD) system mid-year.

#### **Call Dispositions**

Call dispositions, or the resulting action taken for each call, is also a good officer workload indicator. As shown in Figure 15, Incident reports have declined by 36% since 2004. Calls for service resulting in arrest or citation have declined by 64% from 2004 to 2013. Calls resulting in other or no further action have increased by 3%.



**Figure 15: CFS Disposition Trends** 

#### **Call Types**

Further analysis was conducted to investigate the scope and nature of various call types and to ascertain any trends in specific call categories. Sixty-three different calls types during the years 2004 to 2012 were analyzed during this effort. The following call types have seen significant increases since 2010: city code violations (39%), civil standby (57%), welfare checks (19%), animal-related (36%), drunk-disturbing (8%), injured-sick person (18%), drug-related (49%), orders of protection (20%) and accident (24%). Likewise, simple assaults (27%), burglary from vehicle<sup>14</sup> (243%), and fight (7%) calls for service are on the uptick since 2010. Of greater concern is the increase in strong-armed robberies (16%) and assault with a deadly weapon (97%) calls that have climbed above 2004 levels and are of critical concern. Clearly, other serious calls types have been on the decline since 2004. Calls like armed robbery, shots fired, burglary, motor vehicle theft, criminal damage, prowlers and endangerment calls have all declined.

#### **Response Time**

Response times for priority 1<sup>15</sup> calls have increased over the decade, from 5.4 minutes in 2004 to 6.8 minutes in 2013, a 26% increase (see Figure 16). Additionally, priority calls, as a proportion of all CFS, have increased from 46.3% in 2004 to 65.6% in 2013 (see Appendix D).

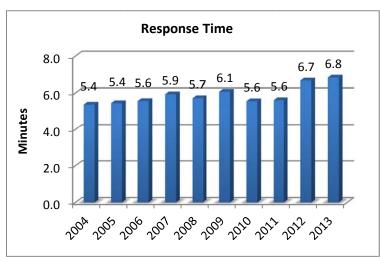


Figure 16: Response Time

<sup>&</sup>lt;sup>14</sup> These numbers may reflect a change in coding or classification since 2004.

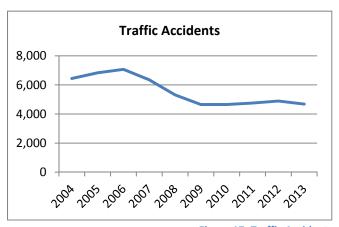
<sup>&</sup>lt;sup>15</sup> Priority 1 (previously known as Priority 0 calls in the old RMS) are considered emergency response CFS, or "hot calls"; Priority 2 (previously Priority 1) are considered "Top Priority." This analysis considers both types. Time calculated from Entry to Arrive.

#### **Traffic Accidents**

Tempe experienced an increase in traffic accidents from 2004 to the decade's peak in 2006, with a steady decline afterwards that has remained relatively consistent since (see Figure 17). Overall, Tempe has seen a 27% decrease in traffic accidents since 2004.

#### **Calls for Service Summary**

Over the past decade, both citizen and officer calls for service have decreased. The city's service population during the day increases greatly, which is generally unaccounted for when examining calls and crime on a per



**Figure 17: Traffic Accidents** 

resident basis. Response times have increased, time spent on call has increased, and the percentage of top priority<sup>16</sup> calls has significantly increased, as well. As future development adds to call complexity and time associated with each call, patrol deficiencies, particularly with the loss of CSOs and park rangers, will need to be addressed to ensure the deployment of adequate resources for every citizen call received.

#### Crime

Crime is another indicator of patrol workload, as a reflection of incidents responded to and reports written as a result of criminal activity in the city. Tempe reclassifies crimes according to Federal guidelines and definitions<sup>17</sup> in order to standardize crime activities, enabling comparison with other cities, states, and nationwide. Part I crimes are considered the most serious, as listed below in Table 15. Part I crime has decreased citywide by 38% from 2004 to 2013 (see trend line in Figure 18). Similarly, violent crime has decreased by 15% and property crime has decreased by 39% over the last decade.

Table 15: 2004-2013 Crime in Tempe

able 13. 2004-2013 Crime in Tempe											
	Reported Part I Crimes in Tempe: 2004 - 2013										
Type of Crime	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Homicide	8	4	6	10	6	2	12	7	11	3	
Forcible Rape	86	72	71	63	34	64	43	45	47	62	
Robbery	263	326	426	330	323	306	268	237	253	224	
Aggravated Assault	623	658	592	513	505	548	460	500	576	542	
Burglary	1,793	1,835	1,795	1,866	1,534	1,478	1,416	1,579	1,251	1,271	
Larceny	8,838	8,260	8,374	7,958	7,562	6,692	6,412	6,804	6,099	6,115	
Motor Vehicle Theft	2,411	2,305	2,420	1,599	1,116	816	650	550	497	487	
Arson	36	57	74	69	54	68	42	28	27	50	
Total	14,058	13,517	13,758	12,408	11,134	9,974	9,303	9,750	8,761	8,754	
Violent Crime	980	1,060	1,095	916	868	920	783	789	887	831	
Property Crime	13,078	12,457	12,663	11,492	10,266	9,054	8,520	8,961	7,874	7,923	

<sup>&</sup>lt;sup>16</sup> This may be due to changes in how we code or classify top priority and hot calls for service.

<sup>&</sup>lt;sup>17</sup> Uniform Crime Reporting (UCR), reported to the Federal Bureau of Investigations (FBI).

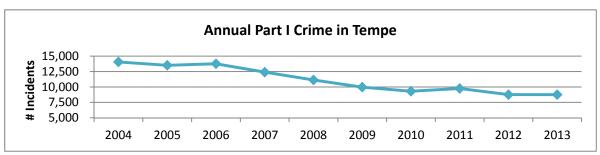


Figure 18: 10-year Tempe Crime Trend

Table 16: 2013 Tempe Crime by Zip Code

	2013 Crime by Zip Code										
Zipcode	Count*	% of City Crime	Rate (per 1,000 pop)**								
85281	5,241	51%	91								
85282	2,918	28%	60								
85283	1,641	16%	37								
85284	535	5%	32								
Тетре	10,335		64								

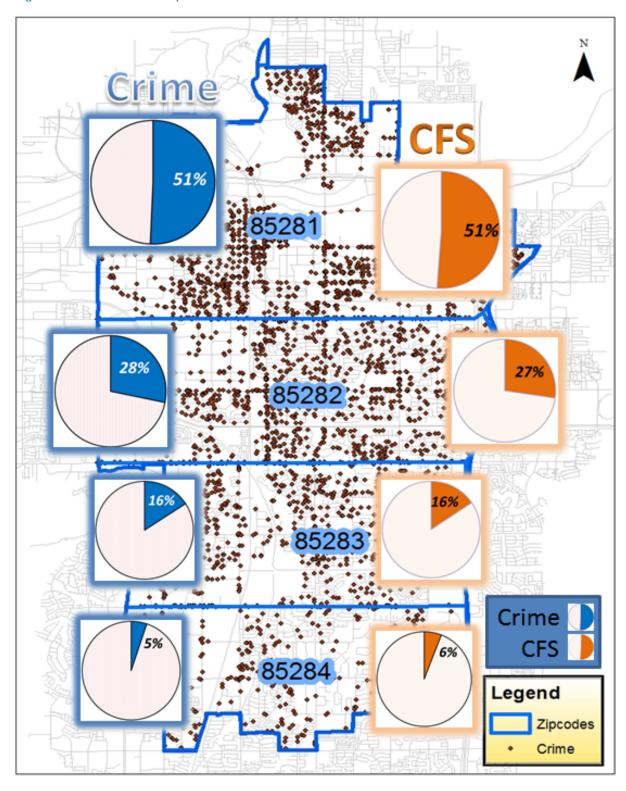
<sup>\*</sup>may not include all crimes, with some unable to geocode due to unknown location

Figure 19<sup>18</sup> shows the current geographic distribution of crime by zip code. As shown, the greatest number of crimes is found in the northern most zip code and decreases moving south. When accounting for population, Tempe experienced 64 Part I crimes per 1,000 people in 2013 (see Table 16). Zip code 85281 saw much higher at 91 per 1,000. Moving south, the rate decreases to 32 per 1,000 in zip code 85284. Three (3) times as many people are victimized in the northern area as compared to the southern area.

<sup>\*\*</sup>based on 2010 census population

<sup>&</sup>lt;sup>18</sup> For geocoding purposes, 2013 crime for this chart is based on Arizona Revised Statutes, not UCR.

Figure 19: 2013 CFS & Crime Map



#### **Valley-wide Violent Crime**

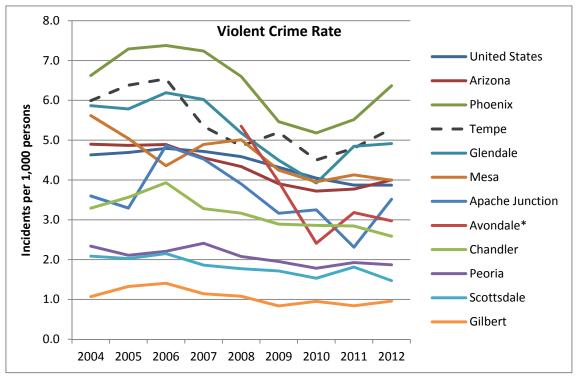
From 2004 to 2012, Tempe's violent crime rate (per 1,000) decreased by 11.7%. However, in 2012 it was ranked second compared to other valley agencies at 5.3 violent crimes reported per 1,000 residents, only behind Phoenix at 6.4 per 1,000 (refer to Table 17 and Figure 20). The US and Arizona had lower violent crime rates than Tempe, at 3.9 and 4.0 per thousand, respectively.

As stated previously, it is important to note that the rate takes into consideration crimes per 1,000 residents. It does not reflect the population influx experienced due to visitors and workers.

**Table 17: Violent Crime Rates** 

			Violent Cr	ime Rate (	per 1,000)				
	2004	2005	2006	2007	2008	2009	2010	2011	2012
United States	4.6	4.7	4.8	4.7	4.6	4.3	4.0	3.9	3.9
Arizona	4.9	4.9	4.9	4.6	4.3	3.9	3.7	3.8	4.0
Phoenix	6.6	7.3	7.4	7.2	6.6	5.5	5.2	5.5	6.4
Tempe	6.0	6.4	6.5	5.3	4.9	5.2	4.5	4.8	5.3
Glendale	5.9	5.8	6.2	6.0	5.2	4.5	3.9	4.8	4.9
Mesa	5.6	5.0	4.4	4.9	5.0	4.2	4.0	4.1	4.0
Apache Junction	3.6	3.3	4.9	4.5	3.9	3.2	3.3	2.3	3.5
Avondale*					5.4	4.0	2.4	3.2	3.0
Chandler	3.3	3.6	3.9	3.3	3.2	2.9	2.9	2.8	2.6
Peoria	2.3	2.1	2.2	2.4	2.1	2.0	1.8	1.9	1.9
Scottsdale	2.1	2.0	2.2	1.9	1.8	1.7	1.5	1.8	1.5
Gilbert	1.1	1.3	1.4	1.1	1.1	0.8	1.0	0.8	1.0

<sup>\*</sup>Avondale did not submit UCR data to the FBI for years 2004-2007



**Figure 20: Violent Crime Trends** 

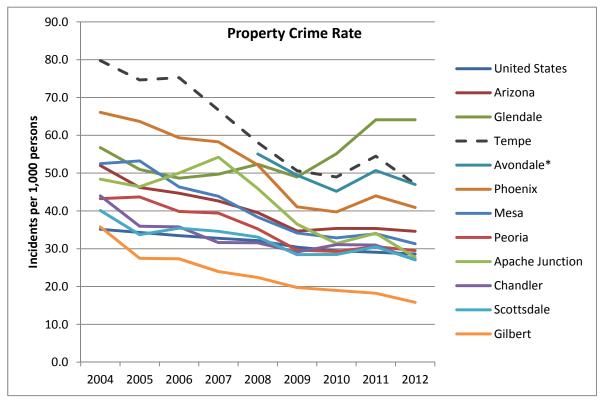
#### **Valley-wide Property Crime**

Tempe's property crime rate has seen a 41% reduction from 2004 to 2012, from 79.8 per 1,000 residents in 2004 to 47.1 in 2012. Tempe ranked second in the property crime rate across the valley in 2012, behind Glendale at 64.1 per 1,000 residents (see Table 18 and Figure 21). Overall, the US and Arizona property crime rates were much lower, at 28.6 and 34.6, respectively.

**Table 18: Property Crime Trends** 

rable 2011 Toperty Clini			Property C	rime Rate (	per 1,000)				
	2004	2005	2006	2007	2008	2009	2010	2011	2012
United States	35.1	34.3	33.5	32.8	32.1	30.4	29.5	29.1	28.6
Arizona	52.0	46.2	44.7	42.6	39.5	34.7	35.4	35.4	34.6
Glendale	56.7	51.0	48.7	49.7	52.3	49.0	55.1	64.1	64.1
Tempe	79.8	74.6	75.2	66.7	58.1	50.6	49.0	54.5	47.1
Avondale*					55.1	49.4	45.2	50.7	47.0
Phoenix	66.1	63.6	59.3	58.3	52.1	41.1	39.7	44.0	40.9
Mesa	52.5	53.2	46.3	43.9	38.3	34.2	32.9	34.0	31.3
Peoria	43.2	43.7	39.9	39.4	35.2	29.6	29.3	30.6	29.5
Apache Junction	48.4	46.4	50.0	54.2	45.9	36.5	31.4	34.1	27.7
Chandler	44.0	35.9	35.8	31.6	31.5	29.1	31.1	31.0	27.1
Scottsdale	40.1	33.7	35.4	34.6	33.1	28.4	28.5	30.5	27.1
Gilbert	35.8	27.5	27.3	24.0	22.4	19.7	19.0	18.2	15.8

<sup>\*</sup>Avondale did not submit UCR data to the FBI for years 2004-2007



**Figure 21: Property Crime Trends** 

#### **Fire Medical Rescue Indicators**

The present organizational structure of the TFMRD encompasses four core divisions: Management Support, Administration Services, Emergency Services and Fire Prevention/Public Education. These divisions and sections provide a variety of programs and services including Fire Suppression, Emergency Medical Services, Fire Prevention and Public Education, Hazardous Materials, Technical Rescue, Dive Team, Medical Support Unit, Support Services and Recruitment and Training. The following workload indicators track core services at a macro level of: calls for service, response time, fire inspection activity and the associated personnel to accomplish these services.

Essential workload indicators for Fire, Medical, Rescue Department includes fire and medical calls, response time, line and admin personnel, and civilians (see Table 19).

	Fire	Demograp	hics		
	2009	2010	2011	2012	2013
Total Calls	18,747	19,563	20,540	20,924	21,772
Fire Calls	2,208	2,126	2,232	1,874	1,959
Medical Calls	15,264	16,261	16,919	17,420	17,759
Response Time (min)	7:10	6:58	6:52	7:59	7:51
Line Personnel	125	145	143	141	141
Admin Personnel	13	12	12	12	12
Civilians	22	29	29	29	29

Table 19: 2009-2013 TFMRD Data

#### **Calls for Service**

Since 2009, the Tempe Fire Medical Rescue Department (TFMRD) has experienced a steady increase in calls for service within Tempe, as illustrated in Figure 22. Between 2009 and 2013, the number of emergency incidents to which the Department responded increased by 16.1%, while emergency medical incidents increased by 16.3% (see Table 19). Of the 21,772 emergency incidents to which the

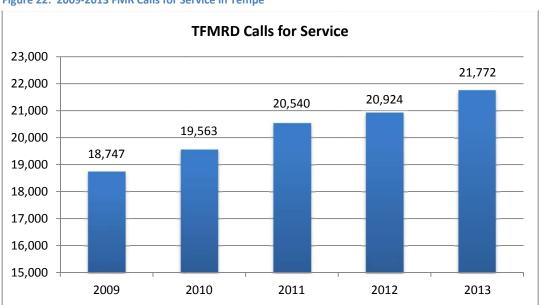


Figure 22: 2009-2013 FMR Calls for Service in Tempe

Department responded in 2013, 81.6% were medical in nature.

While the number of medical assistance calls for service has increased, so have the changes in the nature of the medical calls within the community<sup>19</sup>. From 2009-2013, there was a 26.4% increase of incidents requiring intervention of paramedic level skills from 7,912 to 9,998 (see Figure 23). The number of basic life support incidents increased by 10.4% over the five years, from 7,028 to 7,761.

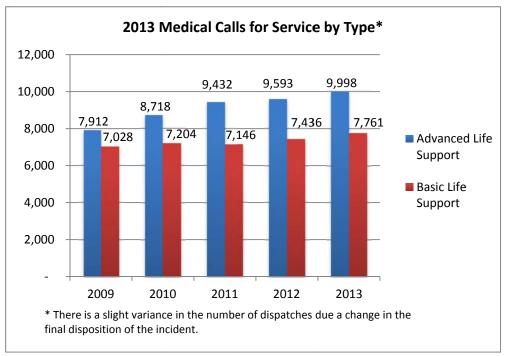


Figure 23: Medical Calls for Service by Type

The TFMRD and Tempe St. Luke's Hospital collaboratively implemented a successful (unfunded) program in December 2013 known as Patient Advocacy Services. With this service, patients known to call for services on a daily or weekly basis are visited by a paramedic or nurse. The visits are designed to educate patients on their medical conditions and prescribed treatments, thus reducing the need for repetitive calls for service, ambulance transportation for emergency hospital care, and costs associated with hospital treatment.

In 1995, Engine 275 was added to offer enhanced service by providing paramedic coverage and reduce response time in the northern section of Tempe. The TFMRD did not add any additional fire companies until Engine 278 was placed into service at Fire Station 1 during the first quarter of 2009 to support an increase of calls for service in the Apache Boulevard area and east side of Arizona State University. However, during the first six months of 2009, Engine 278 was not in-service for the majority of the days due to staffing deficiencies on other fire trucks. Before the addition of Engine 278, the number of calls for service for Engine 271 resulted in fire companies from other stations responding to this area.

<sup>&</sup>lt;sup>19</sup> As a side note, the Affordable Health Care Act provides mandates for medical insurance coverage for those individuals who do not have a plan. The impact on calls for service due to the additional people with medical coverage on the Tempe Fire Medical Rescue Department is unknown.

As noted in Table 19, the addition of Engine 278 is apparent in the reduction of response times for 2010 and 2011. Anecdotally, the improvement in the economy resulted in increased construction, density of off-campus residencies, and rise in demands for service, all resulting in higher response times during 2012 and 2013.

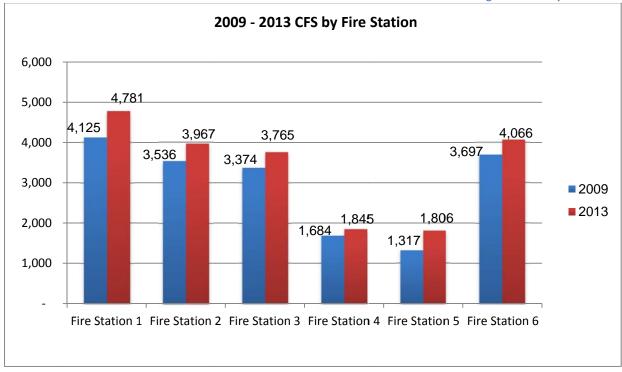


Figure 24: CFS by Fire Station

Between 2009 and 2013, as seen in Figure 24,each Fire Station in Tempe has experienced an increase in calls for service. As noted in Table 20, Fire Station 5 in north Tempe has experienced the greatest percentage increase in calls for service. As previously noted, Fire Station 1, which houses both Engine 271 and Engine 278, has experienced the largest increase in the number of calls for service.

**Table 20: CFS by Fire Station** 

	CFS by Fire Station										
	2009	2013	Difference	%change							
Fire Station 1	4,125	4,781	656	16%							
Fire Station 2	3,536	3,967	431	12%							
Fire Station 3	3,374	3,765	391	12%							
Fire Station 4	1,684	1,845	161	10%							
Fire Station 5	1,317	1,806	489	37%							
Fire Station 6	3,697	4,066	369	10%							

#### Staffing, Infrastructure & Future Development

In addition to the increase in calls for service, between 2013 and 2018, TFMRD will experience known vacancies of 22 positions or 15.6% of front line staff due to retirements. The increase of calls for service between 2009 and 2013 and anticipated growth in density due to multi-story buildings would suggest a continuing increase in demands for service.

The City of Tempe currently has 7,382 commercial, mercantile, retail, health care, industrial, manufacturers, and warehouse occupancies totaling more than 130 million square feet. The Fire Prevention/Public Safety Education Division of TFMRD currently has seven Senior Fire Inspectors, two of which are permanently assigned to Community Development to review building plans, and one who oversees the Department's records management system on a full-time basis. Since 2008, the Fire Prevention Division has lost two inspector positions, but has recovered one position by reclassifying a Public Education position to a Senior Fire Inspector.

There are currently 41 new building projects in Tempe that will have a tremendous impact on the Fire Prevention/Public Safety Education Division. The addition of over 13 million more square feet to the current 130 million square feet will demand the reassignment of an inspector full-time to certain development projects and will increase the frequency cycle for fire code inspections of occupancies and buildings. As an example, due to the complexity of several projects, such as Marina Heights, the division will need to reassign an inspector to construction sites on a full-time basis, essentially removing that person from inspector duties.

Overall, the increase in calls for service, anticipated growth in density due to multi-story buildings, current workload demands, and prior budget reductions will result in the Department requesting additional resources over the next three years through the supplemental process.

## **Appendix**

**Appendix A**: Racial breakdown comparison, as percentage of population; percentage of population that is white to easily compare change from 2000 Census to 2010 Census populations.

	Race as Percent of Population												
		US	Arizona	Tempe	85281	85282	85283	85284					
	White	75.1	75.5	77.5	71.1	78.8	71.9	88.0					
	Black or African American	12.3	3.1	3.7	3.0	4.3	4.2	1.8					
2000	American Indian and Alaska Native	0.9	5.0	2.0	2.6	2.2	6.7	0.4					
2	Asian	3.6	1.8	4.7	6.2	3.4	3.6	6.4					
	Native Hawaiian and Other Pacific Islander	0.1	0.1	0.3	0.4	0.4	0.2	0.1					
	Some other race	5.5	11.6	8.5	12.9	7.6	9.8	1.6					
	Two or more races	2.4	2.9	3.3	3.8	3.3	3.6	1.7					

		US	Arizona	Tempe	85281	85282	85283	85284
	White	72.4	73.0	72.6	69.1	74.0	64.4	85.3
	Black or African American	12.6	4.1	5.9	5.5	6.3	6.9	2.0
010	American Indian and Alaska Native	0.9	4.6	2.9	3.0	3.2	9.1	0.6
70			2.8	5.7	7.0	3.8	4.7	7.6
	Native Hawaiian and Other Pacific Islander	0.2	0.2	0.4	0.3	0.6	0.4	0.1
	Some other race	6.2	11.9	8.5	10.9	8.0	10.2	1.9
	Two or more races	2.9	3.4	3.9	4.2	4.0	4.3	2.5

Percent of Population that is White											
	2000	2010	%change								
US	75.1	72.4	-4%								
Arizona	75.5	73	-3%								
Тетре	77.5	72.6	-6%								
85281	71.1	69.2	-3%								
85282	78.9	74	-6%								
<i>85283</i>	71.9	64.4	-10%								
85284	88.1	85.4	-3%								

**Appendix B**: Educational attainment comparison, as percentage of population.

% High School Graduate or Higher										
	2000	2010								
<b>United States</b>	80.4	85.4								
Arizona	81.0	85.2								
Тетре	90.1	90.2								
85281	83.6	84.7								
85282	90.8	90.0								
85283	87.5	88.1								
85284	96.5	97.4								

% Bachelor's Degree or Higher										
	2000	2010								
United States	24.4	28.2								
Arizona	23.5	26.4								
Тетре	39.6	41.3								
85281	32.4	35.0								
85282	37.1	38.5								
85283	38.0	36.2								
85284	58.9	65.3								

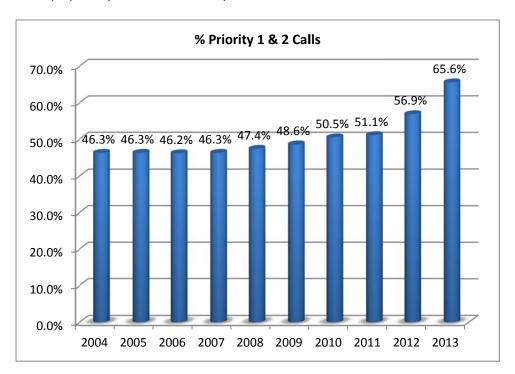
**Appendix C**: Calls for service in select (participating) Valley cities; CFS per 1,000 residents, CFS per sworn position.

Calls for Service & Population - Select Cities											
Chandler	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change 2004-2013
Population	215,705	225,187	230,029	234,607	236,658	236,371	236,123	238,381	241,214	246,197	14%
All CFS	131,783	144,561	156,563	161,972	159,073	150,039	143,540	140,366	134,122	145,083	10%
CFS/1,000 pop	611	642	681	690	672	635	608	589	556	589	-4%
Sworn	294	297	306	314	336	329	320	319	316	n/a	7%
CFS/sworn	448	487	512	516	473	456	449	440	424	n/a	-5%
										,	% change
Gilbert	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2013
Population	156,412	166,919	179,602	196,602	206,264	207,783	208,453	213,519	219,666	227,603	46%
All CFS	92,348	103,642	145,953	157,860	177,129	185,228	189,291	176,849	179,814	189,416	105%
CFS/1,000 pop	590	621	813	803	859	891	908	828	819	832	41%
Sworn	143	187	191	221	224	225	214	220	222	n/a	55%
CFS/sworn	646	554	764	714	791	823	885	804	810	n/a	25%
											% change
Glendale	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2013
Population	229,501	231,126	230,455	230,643	230,658	229,241	226,721	227,446	229,008	231,109	1%
All CFS	163,512	153,056	150,242	152,084	141,272	133,275	128,515	128,336	128,630	130,087	-20%
CFS/1,000 pop	712	662	652	659	612	581	567	564	562	563	-21%
Sworn	331	365	370	370	372	419	408	401	397	n/a	20%
CFS/sworn	494	419	406	411	380	318	315	320	324	n/a	-34%
Mesa	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change
Population	434,952	436,945	438,232	440,670	441,523	440,627	439,041	441,160	444,856	450,310	<b>2006-2013</b> 3%
All CFS	n/a	n/a	371,198	369,503	334,117	318,873	312,479	319,462	313,221	290,853	-22%
CFS/1,000 pop	n/a	n/a	847	839	757	724	712	724	704	646	-24%
Sworn	795	801	829	831	831	801	776	750	780	n/a	-2%
CFS/sworn	n/a	n/a	448	445	402	398	403	426	402	n/a	-10%
Ci 3/3WOIII	11/ 4	11/ u	110	113	702	330	703	420	702	11/ u	% change
Scottsdale	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2006-2013
Population	218,984	221,030	220,907	221,031	220,410	218,888	217,385	217,965	219,713	222,213	1%
All CFS	n/a	n/a	n/a	233,831	231,241	232,177	223,653	232,593	226,832	233,533	0%
CFS/1,000 pop	n/a	n/a	n/a	1,058	1,049	1,061	1,029	1,067	1,032	1,051	-1%
Sworn	367	389	382	433	421	426	423	406	401	n/a	9%
CFS/sworn	n/a	n/a	n/a	540	549	545	529	573	566	n/a	5%
										2012	% change
Surprise	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2013
Population	71,328	89,488	102,901	110,741	115,626	117,230	117,517	118,349	119,530	121,629	71%
All CFS	55,659	66,546	76,631	81,333	92,597	100,972	92,542	95,173	118,142	99,490	79%
CFS/1,000 pop	780	744	745	734	801	861	787	804	988	818	5%
Sworn	77	95	95	106	134	126	124	123	129	n/a	68%
CFS/sworn	723	700	807	767	691	801	746	774	916	n/a	27% change
Tempe	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change 2004-2013
			156,271	156,522	159,336	159,762	161,719	162,503	164,659	165,158	4%
•	158.421	157.711				200,702	,,	,	20.,000		./0
Population .	158,421 192.141	157,711 191.914			172.844	170.315	156.889	152.392	150.861	147.928	-23%
Population All CFS	192,141	191,914	191,408	179,494	172,844 1.085	170,315 1.066	156,889 970	152,392 938	150,861 916	147,928 896	-23% -26%
Population					172,844 1,085 358	170,315 1,066 356	156,889 970 338	152,392 938 336	150,861 916 335	147,928 896 n/a	-23% -26% -2%

All Calls for Service per 1,000 Residents- Select Cities															
City/Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2013				
Chandler	611	642	681	690	672	635	608	589	556	589	-4%				
Gilbert	590	621	813	803	859	891	908	828	819	832	41%				
Glendale	712	662	652	659	612	581	567	564	562	563	-21%				
Mesa			847	839	757	724	712	724	704	646	-24%				
Scottsdale				1,058	1,049	1,061	1,029	1,067	1,032	1,051	-1%				
Surprise	780	744	745	734	801	861	787	804	988	818	5%				
Tempe	1,213	1,217	1,225	1,147	1,085	1,066	970	938	916	896	-26%				

All Calls for Service per Sworn Position - Select Cities															
City/Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2012				
Chandler	448	487	512	516	473	456	449	440	424	n/a	-5%				
Gilbert	646	554	764	714	791	823	885	804	810	n/a	25%				
Glendale	494	419	406	411	380	318	315	320	324	n/a	-34%				
Mesa			448	445	402	398	403	426	402	n/a	-10%				
Scottsdale				540	549	545	529	573	566	n/a	5%				
Surprise	723	700	807	767	691	801	746	774	916	n/a	27%				
Tempe	563	583	593	531	483	478	464	454	450	n/a	-20%				

**Appendix D**: Tempe priority 1 and 2 calls, as a percent of all calls for service.



#### References

**Decennial Census:** The census of population and housing, taken by the Census Bureau in years ending in 0 (zero). Article I of the Constitution requires that a census be taken every ten years for the purpose of reapportioning the U.S. House of Representatives.

For more information, visit: http://www.census.gov/glossary/#term\_Decennialcensus

**American Community Survey:** The ACS replaced the decennial census long form in 2010 and thereafter by collecting long form type information throughout the decade rather than only once every 10 years. Questionnaires are mailed to a sample of addresses to obtain information about households.

The American Community Survey produces demographic, social, housing and economic estimates in the form of 1-year, 3-year and 5-year estimates based on population thresholds. The strength of the ACS is in estimating population and housing characteristics.

#### For more information on the ACS, visit:

http://www.census.gov/glossary/#term\_AmericanCommunitySurveyACS

For more information on the **Daytime Population Estimate**, the ACS sample size and data quality measures (including coverage rates, allocation rates, and response rates), visit: http://www.census.gov/acs/www/methodology/sample\_size\_and\_data\_quality/

Data Tables from the Census and ACS: www.census.gov

The 2010 Decennial Census provided data sets for the following: Population, age, sex, race/ethnicity, households (numbers, occupancy, vacancy rate, owner vs. renter occupied)

The 2007-2011 American Community Survey 5-year estimates provided data sets for the following: median household income, educational attainment, poverty

The 2008-2012 American Community Survey 5-year estimates provided data sets for the following: labor force/unemployment

The Census 2000 Summary File 1 (SF 1) 100-Percent Data provided data sets for the following: Population, age, sex, race/ethnicity, households (numbers, occupancy, vacancy rate, owner vs. renter occupied)

The Census 2000 Summary File 3 (SF 3) - Sample Data provided data sets for the following: median household income, educational attainment, poverty, labor force/unemployment

**Tempe Crime Data** was retrieved from ICIS Records Management System for crime prior to December 1, 2012; crime from this date going forward was retrieved from Versadex, with Uniform Crime Reporting numbers adjusted to follow UCR definitions by the UCR Records Specialist.

**Crime Data** used for geographic comparison purposes was retrieved from the Federal Bureau of Investigations' Uniform Crime Reporting.

**Tempe Calls for Service Data** and all related data (response time, time on call, etc.) was retrieved from ICIS prior to June 6, 2011, and from Versadex thereafter.

**Police Department Staffing** numbers were from the Tempe Annual Budget – Personnel Schedule